

COUNTY OF MOORE  
NORTH CAROLINA

**INFORMAL BID**

ISSUE DATE: October 14, 2016

INFORMAL BID: 2017-04

TITLE: **Well SCADA Project**

ISSUING DEPARTMENT: **COUNTY OF MOORE  
Financial Services  
206 S. Ray Street  
PO Box 905  
Carthage, NC, 28327**

**Sealed Bids** will be received until **4:00 PM Wednesday November 2, 2016** from qualified firms for the **Well SCADA Project** for the County of Moore Public Works Department. **A Pre-Bid Conference will be held at 1:00 pm Tuesday October 25, 2016 at the ground storage tank located at 105 Power Plant Rd South, Pinehurst, NC 28374.**

All inquiries for information concerning the Bid shall be directed to:

**Terra Vuncannon, Purchasing Manager  
PO Box 905  
206 South Ray Street  
Carthage, NC 28327  
(910) 947-7118  
[tvuncannon@moorecountync.gov](mailto:tvuncannon@moorecountync.gov)**

**Sealed Bids** shall be provided to Terra Vuncannon; it is the sole responsibility of the vendor to ensure that its bid reaches the Financial Services by the designated date and hour indicated above.

Firm Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_  
(Printed)

By: \_\_\_\_\_  
(Signature)

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## **INSTRUCTIONS TO BIDDERS**

1. **Sealed Bid shall be submitted to the Issuing Department and include the enclosed Bid Form.** In order for a bid to be considered, it shall be based on the terms, conditions and specifications contained herein and shall be a complete response to this Informal Bid. The County reserves the right to make an award in whole, or in part, and to reject any and/or all bids, and to waive any informality in proposals unless otherwise specified by the Proposer. The Proposer shall sign the bid correctly and bids may be rejected if they show omissions, alterations of form, additions not called for, conditional proposals or any irregularities of any kind.
2. All labor costs, direct and indirect, shall have been determined and included in the proposal. The cost and availability of all equipment, materials, and supplies associated with performing the services described herein shall have been determined and included in the proposal. Do not include sales tax in proposal figures. The County pays sales tax and will add this to your proposal figures separately when invoices are paid. All price quotes shall include delivery to the delivery point, installation and set-up charges, as necessary. Goods shall be set in place ready for owner's use. All goods shall be new and of average quality. No remanufactured, refurbished or used goods will be accepted. Appropriate product information (e.g. brochures, catalog cuts, etc.) shall be included with the proposal.
3. After the Informal Bid issue date, all communications between the Issuing Department and prospective Proposers shall be in writing. No oral questions shall be accepted. Any inquiries, requests for interpretation, technical questions, clarifications, or additional information shall be directed to Terra Vuncannon at the address listed on page one if this solicitation or via e-mail to [tvuncannon@moorecountync.gov](mailto:tvuncannon@moorecountync.gov). All questions concerning this Informal Bid shall reference the section and page number. Questions and responses affecting the scope of goods will be provided to all prospective Bidder by issuance of an Addendum. **A Pre-Bid Conference will be held at 1:00 pm Tuesday October 25, 2016 at the ground storage tank located at 105 Power Plant Rd South, Pinehurst, NC 28374. All written questions shall be received by the Issuing Department no later than 1:00 pm Wednesday October 26, 2016. NO EXCEPTIONS.** All addendums pertaining to this Informal Bid will be posted to the County website at [www.moorecountync.gov](http://www.moorecountync.gov) within 24 – 48 business hours after the deadline for questions. It is the bidder's responsibility to check the website for the addendums.
4. The County will not be responsible for any oral instructions. Should a Proposer find discrepancies in, or omissions from the documents, or should be in doubt as to their meaning, s/he should at once notify the Issuing Department in writing, and a written addendum shall be issued. Acknowledgement of any Addendum received during the time of the proposal shall be noted on the Bid Form in the spaces provided. In closing of a contract, any Addendum issued shall become a part thereof. **It is the Proposer's responsibility to assure that all addenda have been reviewed and, if need be, signed and returned.**
5. Proposals will be examined promptly after opening and award will be made at the earliest

possible date. The prices quoted must be held firm, and no proposals may be withdrawn until **90 days** after proposal opening date. The County reserves the right to conduct any test/inspection it may deem advisable to ensure services/materials/supplies/equipment, as appropriate, conform to specifications.

6. Pursuant to North Carolina General Statutes Section 143-131, “award shall be made to the lowest responsible, responsive bid or bidders, taking into consideration quality, performance and the time specified in the proposals for the performance of the contract.”
7. The materials/supplies/equipment furnished under any resulting contract shall be covered by the manufacturer’s most favorable commercial warranty. Each Proposer shall plainly set forth the warranty for the goods in the proposal. Operations and maintenance manuals for equipment shall also be provided, as appropriate.
8. All purchases for goods or services are subject to the availability of funds for this particular purpose.
9. The contractor shall not represent itself to be an agent of the County.
10. The General Statutes of the State of North Carolina, insofar as they apply to purchasing and competitive bidding, are made a part hereof.
11. The County of Moore is committed to creating and maintaining an environment free from harassment and other forms of misconduct that fundamentally compromise the working environment of the County. All contractors performing work/services at a County facility shall take all necessary steps to assure that none of its employees engage in harassment or intimidation relating to personal beliefs or characteristics of anyone on the County’s premises, including but not limited to, race, religion, age, color, sex, national origin or disability. Such harassment is unacceptable and will not be condoned in any form at the County of Moore. If such conduct occurs, the contractor will take all necessary steps to stop it and prevent its future occurrence. This policy shall be strictly enforced.
12. For all the work being performed under this Contract, the County of Moore has the right to inspect, examine, and make copies of any and all books, accounts, records and other writing relating to the performance of the work. Audits shall take place at times and locations mutually agreed upon by both parties, although the vendor/contractor must make the materials to be audited available within one (1) week of the request for them.
13. The Proposer agrees that it will not identify the County of Moore as a client in any other proposal, resume, or informational brochure without first requesting and obtaining, in writing, the permission of the County of Moore Board of Commissioners.
14. All Proposers must complete and submit the Vendor Form with their proposal package. This information will be used to create or update the County’s vendor file.
15. Proposers are cautioned that this is an informal bid, not a request for contract, and the

County of Moore reserves the right to reject any and/or all proposals. It further reserves the right to waive informalities insofar as it is authorized so to do where it deems it advisable in protection of the best interests of the County.

16. Proposals will be tabulated, evaluated and a recommendation presented to the County of Moore Board of Commissioners for their approval.
17. Any and all exceptions to the Specifications must be stated in writing, giving complete details of what is to be furnished in lieu of requested Specifications.
18. The County of Moore reserves the right to cancel and terminate any resulting contract, in whole or in part, without penalty, upon forty-five (45) days' notice to the Vendor(s). Any contract cancellation shall not relieve the Vendor(s) of the obligation to deliver any outstanding services issued prior to the effective date of the cancellation.
19. **Proposals in one (1) original and two (2) copies will be received from each Proposer in a sealed envelope or package.** Each original shall be signed and dated by an official authorized to bind the form. Unsigned proposals will not be considered.
20. Upon receipt by Moore County Financial Services, your Proposal is considered a public record except for material which qualifies as "trade secret" information under N.C. Gen. Stat. 66-152 et. seq. After the Proposal opening, your Proposal may be reviewed by the County's evaluation committee, as well as other County staff and members of the general public who submit public records requests. To properly designate material as trade secret under these circumstances, each Proposer must take the following precautions: (a) any trade secrets submitted by a Proposer must be submitted in a separate, sealed envelope marked "Trade Secret — Confidential and Proprietary Information — Do Not Disclose Except for the Purpose of Evaluating this Proposal," and (b) the same trade secret/confidentiality designation must be stamped on each page of the trade secret materials contained in the envelope.

In submitting a Proposal, each Proposer agrees that the County may reveal any trade secret materials contained in such response to all County staff and County officials involved in the selection process, and to any outside consultant or other third parties who serve on the evaluation committee or who are hired by the County to assist in the selection process. Furthermore, each Proposer agrees to indemnify and hold harmless the County and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the Proposer has designated as a trade secret. Any Proposer that designates its entire Proposal as a trade secret may be disqualified.

21. Proposer shall comply with the North Carolina Workers' Compensation Act and shall provide for the payment of workers' compensation to its employees in the manner and to the extent required by such Act. In addition the Provider shall maintain, at its expense, the following minimum insurance coverage:

General Liability - \$2,000,000  
Auto Liability - \$2,000,000  
Umbrella Coverage - \$5,000,000

22. Contractor must have active North Carolina Electrical License.

# MOORE COUNTY WATER DISTRIBUTION SYSTEM SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM

## PART 1 – GENERAL

### 1.01 PROJECT DESCRIPTION

- A. The work to be accomplished under this section shall consist of furnishing and installing the Well Supervisory Control and Data Acquisition (SCADA) system to function as specified herein. The system manufacturer shall furnish a completely integrated all solid state cellular or radio telemetry based SCADA system for the County's wells and booster stations in the Village of Pinehurst. It shall be the Contractor's responsibility to supply a system that is compatible with existing equipment and new equipment.
- B. OWNER'S Responsibilities: The Owner will furnish and install the following:
1. Pressure transducers at each site
    - a. 4-20 mA, 0-20 mA, or 0-10 VDC output
  2. Flow meter registers for remote reading
    - a. DC Pulse (10-24V, 2.5 mA – 500 mA sinking, sourcing, open collector or dry contact), and/or Analog output (0-20 mA, 4-20 mA, or 0-10 VDC)
  3. Radio system and path study access
    - a. For physical radio path study, Owner will provide access for bucket truck and/or mobile telescoping tower trailer at each site.
    - b. In the event that 55' wood poles are chosen for radio-based system, Owner will prepare site and provide necessary means for pole setting equipment to access all well and booster pump sites.
- C. EXISTING SCADA SYSTEM
1. Existing Water Distribution System
    - a. Moore County has a radio SCADA system for its water distribution system. Remote Terminal Units (RTUs) and Programmable Logic Controllers (PLCs) are installed at the following locations (**see map in Appendix A**):

Booster Pump Station	Thurlow
Elevated Tank	East Moore
Booster Pump Station	McCaskill
Booster Pump Station	Hwy 73
Elevated Tank	Cannon Park
Pump Station	NC 211 Booster
North Elevated Tank	Seven Lakes

- b. The existing SCADA system utilizes Trihedral VTScada Version 11.1 software and two (2) dedicated industrial SCADA Central Control computers at the County's Ground Storage Site located at 105 Power Plant Road in Pinehurst. The central computer contains redundant servers with modem which stores and provides the data for remote internet access. The existing water distribution SCADA system was supplied and installed by Custom Controls Unlimited of Raleigh, NC.
  2. Existing Well Control System
    - a. The County's existing Well control system consists of leased telephone lines which transmit the call-to-run from the County's Central Control Facility at the Ground Storage Tank site to eighteen (18) wells and two (2) booster pumping stations (**see map and list Attached in Appendices B.1 and B.2**). The leased lines signals are received at Ground Storage by an Autocon relay panel. The well signals are relayed to a new Andover control panel which is connected to a user interface computer. The Andover control panel contains web-based Struxureware open-protocol controllers. It is anticipated that all these controls will be replaced by the Well SCADA system proposed herein.
  3. Existing Well Operations
    - a. The eighteen (18) wells and two (2) booster pump stations are called-to-run by the Tank level in the Cannon Park or McLean 1 tank, selectable by the County. The Cannon Park tank has a radio RTU while the McLean tank relies on the leased line signal to the Ground Storage Tank site.
    - b. There are two sets of wells that are blended for water quality purposes as follows:
      - (1) Well 5A and Well 9
      - (2) Well 23 and Well 11
    - c. Radio RTUs are installed at each site to control the blending wells. Well 24 is planned to be blended with Well 23 and Well 11 under a future project. Radio RTUs are installed at each site to control the blending wells. The SCADA upgrade for the blending facilities will be done separate from this contract.
- D. CONTRACTOR shall supply a complete and working Well SCADA system, including the following:
  1. All equipment required
  2. All labor for installation
  3. Engineering submittal and shop drawings prior to installation
  4. All ancillary equipment, hardware, software and appurtenances needed for proper installation and operation of equipment
  5. Spare parts and maintenance tools as described below and as recommended by the manufacturer.
  6. Operations and maintenance manuals as detailed below
  7. All start-up labor and services
  8. All operator training

## **1.02      QUALITY ASSURANCE**

- A.      Qualifications of Manufacturers: Products used in the work of this Section shall be produced by manufacturers regularly engaged in the manufacture of similar items and with a history of satisfactory production acceptable to the Owner.
  - 1. The Contractor shall provide evidence of, and warrant compliance with, substantially all below listed requirements.
  - 2. The Contractor shall have been in business furnishing and installing remote facility monitoring and control services to the water utility industry or a substantially similar industry for at least six years.
  - 3. The Contractor shall utilize open architecture system with the Contractor and the manufacturer warranting the proposed system.
- B.      Construction
  - 1. The installation of the equipment shall be completed by an electrical contractor licensed in the State of North Carolina.

## **1.03      SUBMITTALS AND SUBSTITUTIONS**

- A.      The following product data shall be submitted:
  - 1. Product literature, specifications, dimensional drawings and instruction manuals for all proposed equipment and hardware.
  - 2. Manufacturer's recommended installation procedures which, when approved by the Engineer, will become the basis for accepting or rejecting actual installation procedures used.
  - 3. Any and all exceptions to the specifications must be detailed in writing on the bid documents.
- B.      Upon completion of this Portion of the Work, and as a condition of its acceptance, deliver to the Engineer three copies of an operation and maintenance manual.

## **1.04      PRODUCT HANDLING**

- A.      General: Comply with manufacturer's recommendation

## **1.05      EQUIPMENT COMPATIBILITY**

- A.      The Contractor shall be responsible for coordinating the instrumentation equipment, communication equipment and other related equipment so that all elements are compatible and form a complete working system. Shop drawing submittals shall include sufficient information regarding component compatibility to demonstrate compliance with this requirement.
- B.      The equipment for the proposed cellular system shall be compatible with Verizon cellular service.

## **PART TWO - PRODUCTS**

### **2.01 MONITORING AND CONTROL SYSTEM**

#### **A. FUNCTIONALITY**

1. The proposed well SCADA system shall interface with the existing water distribution system SCADA system. The proposed system shall contain:
  - a. Hardware and PLC located at each well that continually monitors pump activity, fault conditions, flow meter data, pressure data and reports this information on a periodic and exception basis using a secure protocol over a private network. This information is to be available through a Web- accessible user-interface.
  - b. A web-accessible application that is configured to present all fault and operating conditions, computed values in tabular, graphical, map and report formats. The application will provide alarm notification to designated personnel based on alarms detected by the remote hardware and by computations performed by the system.
2. The system shall be fully integrated between the hardware and accessible user interface providing control and configuration capability of the hardware from the hardware installed at each site and/or the Web application. The Web application shall be automatically updated whenever any configuration changes are made to the hardware and vice versa.

#### **B. STATION HARDWARE- CELLULAR SYSTEM**

1. User Interface: The hardware at each well and booster pump site shall report to a local PLC. User interface for each site will be provided at the Central Facility at the Ground Storage Tank site, and remotely accessed over the internet.
2. Status for proposed cellular system: The user shall be able to observe the current value and status of any of the monitored conditions via a remote web interface and at the Central Facility at the Ground Storage Tank site.
  - a. Thirteen (13) Well Sites: At the thirteen (13) well sites, furnish and install one (1) NEMA 4X Well RTU Panels UL-508A certified and one programmable expandable PLC capable of monitoring and controlling the following:
    1. 10 Digital Inputs, 24VDC
      - a. Well Pump Running
      - b. HOA Status
      - c. Motor Fail/Overload
      - d. Phase Fail/Power Fail
      - e. Chlorine Pump Running (where available)
      - f. Caustic Pump Running (where available)
      - g. Phosphate Pump Running (where available)
      - h. Flow Total Pulse (from Owner hardware)
      - i. Spare
    2. 6 Digital Outputs, Relay
      - a. Well Pump Call
      - b. Chemical Pump Call
    3. 4 Analog Inputs, 4-20mA
      - a. Flow Rate (future)
      - b. Discharge Pressure (from Owner hardware)

- c. Well Level (future)
  - d. Cell Signal Strength
- 4. Ethernet Interface
- 5. Real-Time Data Management
- 6. IEC 61131-3 programming languages
  - a. Ladder Diagram
  - b. Function Block Diagram
  - c. Sequential Function Chart
- 7. Calculated Values to SCADA
  - a. Total Flow
  - b. Daily Flow
  - c. Fail to Run
  - d. Runtime
  - e. Start Count
  - f. Chemical Pump Fail to Run
  - g. Flow Fail
- 8. Interposing Relays as Required
- 9. (1) One 24VDC Power Supply
- 10. (1) One Cellular Data Modem
- 11. (1) One UPS
- 12. Surge Protection
- b. Wells 5A & 9 and Wells 11 & 23 (Not part of this project)
  - 1. Modify existing Programming to Integrate with New Well SCADA System
  - 2. At Wells 5A & 9, (2) Two Cellular Cellular Data Modems (1per site)
- c. Ground Storage Tank Site
  - 1. Cellular Interface Addition to Master SCADA Panel with (1) One Cellular Data Modem
  - 2. Program and graphical display modifications to existing SCADA
- d. Midland and Dawkins Booster Pump Station: At each site furnish and install one (1) NEMA 4X RTU Panel UL-508A certified and one (1) programmable, expandable PLC capable of monitoring and controlling the following:
  - 1. 10 Digital Inputs, 24VDC
    - a. BP Running (2)
    - b. HOA Status (2)
    - c. Motor Fail to run (2)
    - d. Power Fail
    - e. Flow Total Pulse (from Owner hardware)
    - f. Spare
  - 2. 6 Digital Outputs, Relay
    - a. BP Call (2)
  - 3. 4 Analog Inputs, 4-20mA
    - a. Flow Rate (future)
    - b. Discharge Pressure (from Owner hardware)
    - c. Suction Pressure (from Owner hardware)
    - d. Cell Signal Strength
  - 4. Ethernet Interface
  - 5. Real-Time Data management
  - 6. IEC 61131-3 programming languages
    - a. Ladder Diagram
    - b. Function Block Diagram
    - c. Sequential Function Chart

7. Calculated Values to SCADA
  - a. Total Flow
  - b. Daily Flow
  - c. Fail to Run
  - d. Runtime
  - e. Start Count
  - f. Flow Fail
8. Interposing Relays as Required
9. (1) One 24VDC Power Supply
10. (1) One Cellular Data Modem
11. (1) One UPS
12. Surge Protection

### C. STATION HARDWARE- RADIO SYSTEM

1. User Interface: The hardware at each well and booster pump site shall report to a local PLC. User interface will be at the Central Facility at the Ground Storage Tank site and remotely accessed over the internet.
2. Status for proposed radio system: The user shall be able to select any of the monitored conditions to be included in an automatic scrolling display that presents the current value and status of the condition. Remote or local status monitoring shall be available. The following parameters shall be available for the user to select:
  - a. Thirteen (13) Well Sites: At the thirteen (13) well sites, furnish and install one (1) NEMA 4X Well RTU Panels, UL-508A certified and one programmable expandable PLC capable of monitoring and controlling the following:
 

Same as above for cellular system except:  
Delete "10. (1) One Cellular Data Modem" and  
Substitute "10. Industrial Data Radio"
  - b. Wells 5A & 9 and Wells 11 & 23 (Not part of this project)
    1. Modify existing Programming to Integrate with New Well SCADA System
    2. At Wells 5A & 9, (2) Two Industrial Data Radios (1per site)
  - c. Ground Storage Tank Site
    1. Program and graphical display modifications to existing SCADA
  - d. Midland and Dawkins Booster Pump Station: At each site furnish and install one (1) NEMA 4X RTU Panel, UL-508A certified and one (1) programmable, expandable PLC capable of monitoring and controlling the following:
 

Same as above for cellular system except:  
Delete "10. (1) One Cellular Data Modem" and  
Substitute "10. Industrial Data Radio"
3. Antennae
  - a. Radio Path Study. A physical radio path study shall be conducted to determine the need for antennas.
  - b. For bid comparison purposes 55 ft. class 3 wooden poles and direct mounting on the well house building are included on the bid form.
  - c. Coaxial cable shall be provided compatible with the antenna and radio.

D. ALARMS

1. Alarm activation: Remote and local alarm activation shall be provided. Any monitored parameter that exceeds the normal operating conditions as defined by the user shall enter into an alarm state. Alarm states should be displayed on the SCADA system and on any provided local interface. A unique event shall be created for each alarm state. Each event shall be stored for viewing in a chronological order. Each event should be relayed to the SCADA system and alarm notification service. The system shall contain a store and forward buffer capable of saving events for later transmission if immediate cellular transmission is not possible due to cellular coverage issues. The system shall automatically try to re-establish cellular connection on a continuous basis.

E. DATA

1. Update Rate: Standard status update rates of all monitored conditions shall be available based on a 10 MB per month data plan with the master unit having a data plan equal to the sum of all the remotes. Any alarm exceptions shall be reported immediately. Any additional monthly or yearly communication fees shall be listed.

2. History: The Control system shall include Capabilities to generate graphs and reports of the system's historical operations.

F. CONTROLS

1. Programming: The user should be able to modify the entire system setpoints and controls remotely over a web-accessed interface or on site at the central SCADA computer. The user shall specify staff with the authority to modify set-points and controls.

2. The SCADA system shall include a user-configurable access code that must be entered prior to any programming or control operations.

G. SYSTEM REMOTE CONNECTIVITY

1. The existing central computer at the Ground Storage Tank site shall be updated to receive the new well SCADA System data. Provide a cellular interface addition to Master SCADA panel, including one (1) Cellular Data Modem. User interface shall also be available over the web to authorized users.

2. VT SCADA Reprogramming: The existing VT SCADA program shall be reprogrammed to incorporate well SCADA system data; the graphics display shall be updated as well.

H. LIGHTNING PROTECTION

1. Provide lightning protection on all digital, analog and antenna signals.

**2.02 OTHER MATERIALS**

A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

B. Provide interposing relays as required.

- C. Provide UPS at each site.

## **PART THREE - EXECUTION**

### **3.01 SURFACE CONDITIONS**

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

### **3.02 COORDINATION**

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Additional coordination with the supplier's information here.

### **3.03 INSTALLATION**

- A. Contractor shall install and make operational all components of the SCADA Panel and systems and appurtenances as specified herein. Installation shall include mounting the RTU, connecting all electrical and instrumentation supplied and installed by the Owner and software programming to make the complete system operational for the purpose intended.
- B. Install the work of this Section in strict accordance with the manufacturer's recommendations and shop drawings as approved by the Owner.
- C. Upon completion of the installation, carefully inspect each component and verify that all items have been installed in their proper location, adequately anchored, and adjusted to achieve optimum operation. If required, the Contractor shall adjust the antenna placement or elevation to obtain consistent, stable operation of the system.

### **3.04 SERVICE**

- A. Demonstrate to the Owner's operation and maintenance personnel the proper methods for operating and maintaining the equipment and the contents of the operation and maintenance manual required to be submitted under Article 1.03 in this Section.
- B. The Vendor shall furnish to the Owner a written report prepared by the instrumentation equipment manufacturer's field service technician certifying that:
  - 1. The equipment has been properly installed in accordance with manufacturer's recommendations.
  - 2. The equipment check out and initial start-up activities have been completed in accordance with manufacturer's recommendations and under the technician's supervision.
  - 3. The antenna placement has been optimized.

4. The equipment is free from any undue stress imposed by connecting conduit or anchor bolts.
  5. The equipment operates satisfactorily and in compliance with the requirements of this Section.
- C. The Contractor shall include with his bid, the on-site services of the instrumentation equipment manufacturer's field service technician for an eight (8) hour period. This service shall be for the purpose of instruction of the Owner's personnel and testing of the system.

**3.05 WARRANTY**

- A. All hardware and services shall have a warranty of two (2) years from date of installation.

**INFORMAL BID 2017-04**  
**WELL SCADA PROJECT**  
**BID FORM**

This Bid consist of equipment, labor, materials, and traffic control for the **Well SCADA Project**. Use this form for submitting Bids. No alterations, changes in Bid format will be allowed. All items should be priced for the units and quantities specified. The County of Moore shall reserve the right to reject any or all Bids. Opening will not be public.

**TOTAL PROJECT COST:** \_\_\_\_\_

**Responsive Bid must include the following documents:**

- 1. Signed Bid Form**
- 2. Notarized Non-Collusion Affidavit**
- 3. Notarized E-Verify Affidavit**
- 4. Iran Divestment Act Certification**
- 5. Current W-9 Form**
- 6. Vendor Application (including references, equipment and resumes)**
- 7. Copy of all pertinent licenses**
- 8. Proof of Insurance**

On behalf of \_\_\_\_\_ (Bidder), I am submitting a bid for the **Well SCADA Project**. This Bid covers equipment, labor, materials, traffic control and all other incidentals to complete the project. I certify that the contents of this Bid are known to no one outside the undersigned, and to the best of my knowledge all requirements have been complied with.

By: \_\_\_\_\_  
(Printed)

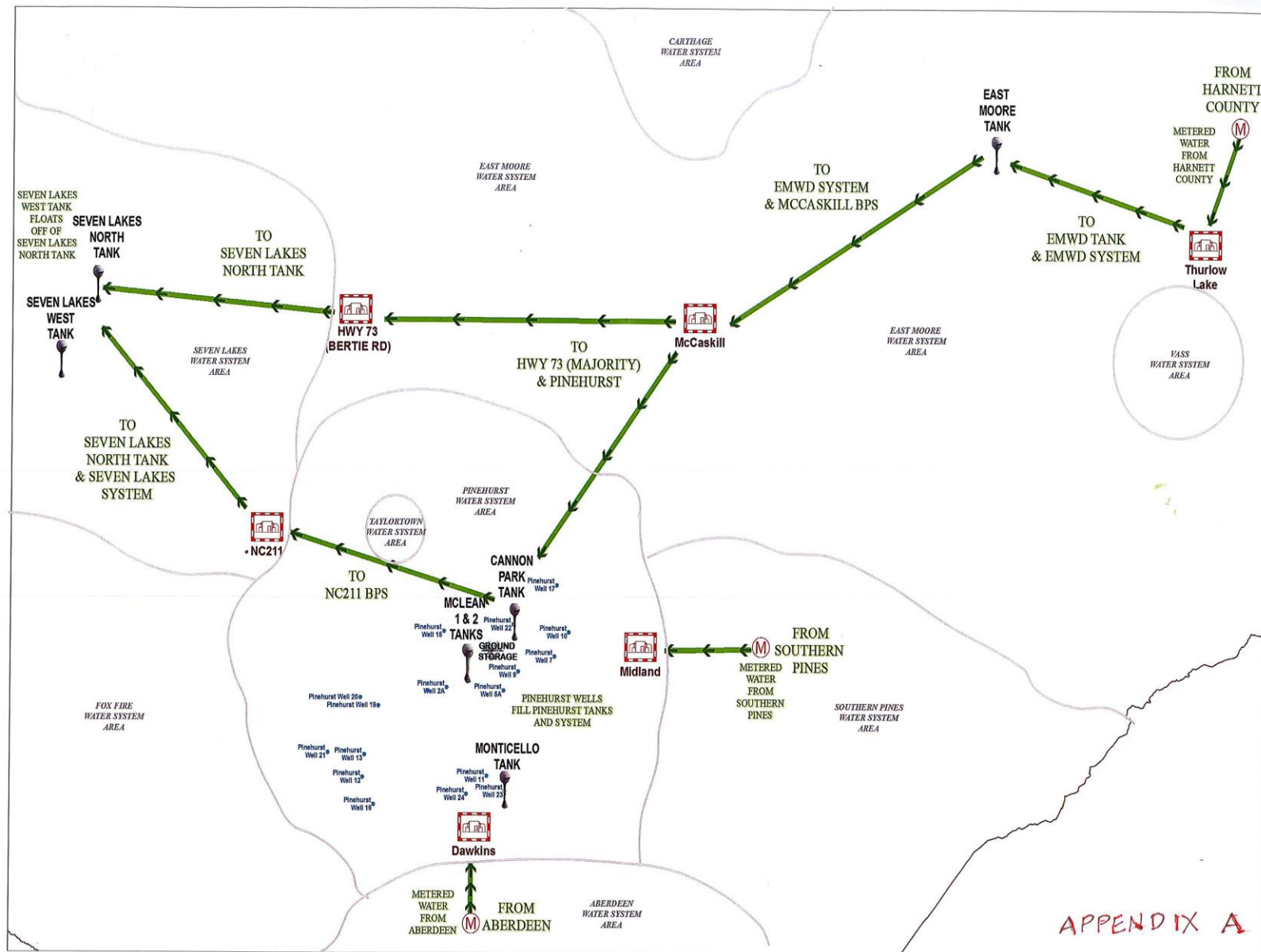
By: \_\_\_\_\_  
(Signature)

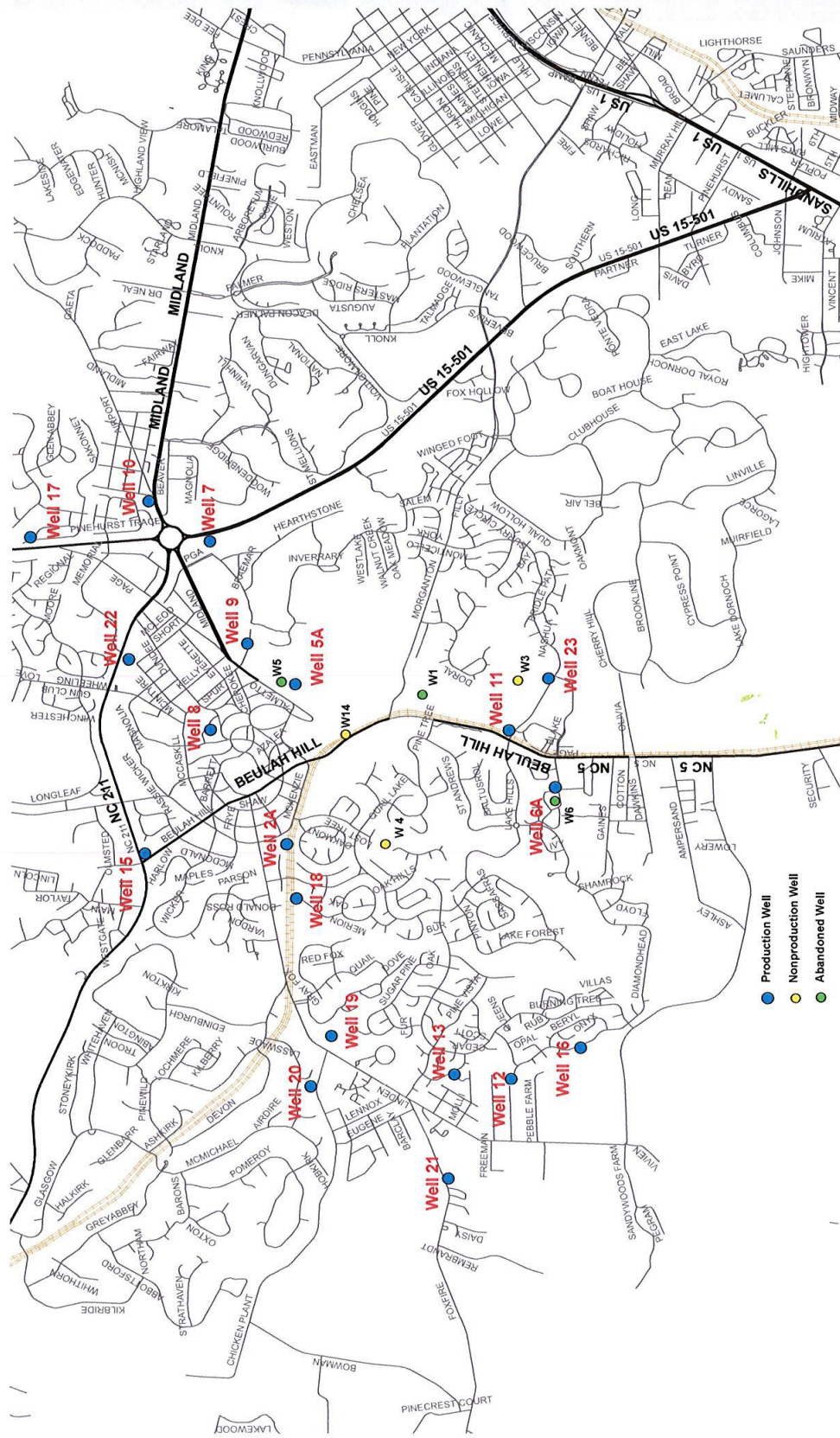
Date: \_\_\_\_\_

Receipt of the following addendum is acknowledged:

Addendum No. \_\_\_\_\_ Received: (circle) YES / NO Date: \_\_\_\_\_

Addendum No. \_\_\_\_\_ Received: (circle) YES / NO Date: \_\_\_\_\_





# APPENDIX B.1

APPENDIX B.2											
WELL NUMBER	ADDRESS	TOWN	TYPE	CAPACITY (GPM)	HORSE POWER (Hp)	PHASE (Ø)	VOLTAGE (V)	ELECTRIC ACCOUNT	METER SIZE (INCHES)	METER TYPE	DIAL NUMBER
2A				105	5			159.031.1112	3	Badger	T450
5A				195					3	Badger	T450
7				155	5		240	358.955.6996	3	Badger	T450
9				130				053.164.4771	3	Badger	T450
10				140				520.586.6667	3	Badger	T450
11				85				756.261.0464	3	Badger	T200
12				170				512.737.2075	3	Badger	T400
13				115				739.660.6274	3	Badger	T450
15				96				252.130.0992	2	Badger	T200
16				135				720.892.3008	3	Sensus W-350	Change out
17				50	2		240	427.950.1003	2	Badger	T200
18				90				296.463.3883	3	Badger	T450
19				130				630.247.7994	3	Badger Turbo	T450
20				120					3	Badger	T450
21				100	20	3	208	731.589.9224	3	Badger Turbo	T400
22				115				706.457.7773	3	Badger	T450
23				66					3	Badger	T200
24											
MASTER METER	ADDRESS	TOWN	TYPE	ELERCTRICAL ACCOUNT	METER SIZE (INCHES)	METER TYPE	METER NUMBER				
Dawkins PS					6	Neptune					
Midland PS					6	Neptune					

## NON-COLLUSION AFFIDAVIT

State of North Carolina  
County of Moore

I \_\_\_\_\_, being first duly sworn, deposes and says that:

He/She is the \_\_\_\_\_ of \_\_\_\_\_, the proposer that has submitted the attached proposal;

He/She is fully informed respecting the preparation and contents of the attached proposal and of all pertinent circumstances respecting such proposal;

Such proposal is genuine and is not a collusive or sham proposal;

Neither the said Proposer nor any of its officers, partners, owners, agents, representatives, Employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Proposer, firm or person to submit a collusive or sham proposal in connections with the contract for which the attached proposal has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached proposal or of any other Proposer or to fix overhead, profit or cost element of the proposal price of any other Proposer or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the County of Moore or any person interested in the proposed contract; and

The price or prices quoted in the attached bid are fair, proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

\_\_\_\_\_  
Signature and Title

State of North Carolina  
County of \_\_\_\_\_  
Subscribed and sworn before me,  
This \_\_\_\_\_ day of \_\_\_\_\_, 2016

\_\_\_\_\_  
Notary Public  
My commission expires \_\_\_\_\_

Moore County E-Verify Affidavit

STATE OF NORTH CAROLINA

AFFIDAVIT

COUNTY OF MOORE

I, \_\_\_\_\_ (the individual attesting below), being duly authorized by and on behalf of  
\_\_\_\_\_ (the entity bidding on project hereinafter "Employer") after first being duly  
sworn hereby swears or affirms as follows:

1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25(5).
  2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS§64-26(a).
  3. Employer is a person, business entity, or other organization that transacts business in this State and that employs 25 or more employees in this State. (mark Yes or No)
    - a. YES \_\_\_\_\_, or
    - b. NO \_\_\_\_\_
  4. Employer's subcontractors comply with E-Verify, and if Employer is the winning bidder on this project Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer.
- Executed, this \_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
Signature of Affiant  
Print or Type Name: \_\_\_\_\_

State of North Carolina  
County of \_\_\_\_\_

Signed and sworn to (or affirmed) before me, this the \_\_\_\_  
day of \_\_\_\_\_, 2016.

My Commission Expires:

\_\_\_\_\_  
Notary Public

(Affix Official/Notarial Seal)

RFP Number (if applicable): \_\_\_\_\_

Name of Vendor or Bidder: \_\_\_\_\_  
\_\_\_\_\_

**IRAN DIVESTMENT ACT CERTIFICATION  
REQUIRED BY N.C.G.S. 147-86.59**

---

As of the date listed below, the vendor or bidder listed above is not listed on the Final Divestment List created by the State Treasurer pursuant to N.C.G.S. 147-86.58.

The undersigned hereby certifies that he or she is authorized by the vendor or bidder listed above to make the foregoing statement.

---

Signature

Date

---

Printed Name

Title

*Notes to persons signing this form:*

N.C.G.S. 147-86.59(a) requires this certification for bids or contracts with the State of North Carolina, a North Carolina local government, or any other political subdivision of the State of North Carolina. The certification is required at the following times:

- When a bid is submitted
- When a contract is entered into (if the certification was not already made when the vendor made its bid)
- When a contract is renewed or assigned

N.C.G.S. 147-86.59(b) requires that contractors with the State, a North Carolina local government, or any other political subdivision of the State of North Carolina must **not** utilize any subcontractor found on the State Treasurer's Final Divestment List.

The State Treasurer's Final Divestment List can be found on the State Treasurer's website at the address [www.nctreasurer.com/iran](http://www.nctreasurer.com/iran) and will be updated every 180 days.



# Vendor Application

## County of Moore

Financial Services – Purchasing Division

PO Box 905

Carthage, NC 28327

Phone: (910) 947 - 7118

Fax: (910) 947 - 6311

Please Type or Print Legibly

Federal ID # \_\_\_\_\_ SS # \_\_\_\_\_ Vendor

Vendor Name
-------------

Date
------

# \_\_\_\_\_

ORDER ADDRESS		PAY ADDRESS	
Street		Street	
Street		Post Office Box	
City		City	
State	Zip Code	State	Zip Code

CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER
----------------	------------------	------------

YEAR ESTABLISHED	TERMS	DISCOUNT
------------------	-------	----------

CONTRACTOR'S LICENSE # (if applicable)	SIGNATURE
	EMAIL ADDRESS:

This firm certifies that it is a: (if applicable)

☐ Disabled

☐ Minority Business Enterprise

☐ Women Business

Enterprise

To qualify for MWBE status, 51% of the company must be owned and controlled by minority groups or women. For the purpose of this definition, minority group members are Black Americans, Hispanic Americans, American Indians and/or American Women. To qualify for Disabled status, 51% of the company must be owned and controlled by disabled persons.

## Product(s) and/or Service(s)

Please list the type product(s) and/or Service(s) that your company can provide.

_____	_____	_____
_____	_____	_____

**WELL SCADA PROJECT  
TO SERVE  
MOORE COUNTY PUBLIC WORKS DEPARTMENT**

**REFERENCES, EQUIPMENT AND RESUMES**

Please list references, available equipment and resumes.

**Request for Taxpayer  
Identification Number and Certification**

**Give Form to the  
requester. Do not  
send to the IRS.**

Print or type See Specific instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <b>Note.</b> For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ (Applies to accounts maintained outside the U.S.)
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I Instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

**Note.** If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
				-					
or									
Employer identification number									
				-					

**Part II Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶

**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/w9](http://www.irs.gov/w9).

**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued).
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.